Appendix D: XML Technologies

The following is a list of XML technologies that aid in the development of XML based applications.

XML Schema

XML Schemas specify the rules surrounding the logical structure of an XML document. It is a language that describes and constrains the contents of XML documents. It defines the elements present in the document and the order in which they appear, as well as any attributes that may be associated with an element. XML Schemas are themselves XML documents and thus have the power and flexibility of XML built in.

For additional information refer to:
http://www.w3.org/XML/Schema

DTD

DTD stands for Document Type Definition and is similar to XML Schema in that it is used to enforce the structure and ordering of content within XML documents. The main difference between DTDs and XML Schemas is that DTD is not XML based and thus is not as extensible and does not support XSLT.

For additional information refer to:
http://www.xmlfiles.com/dtd/

XSLT

Extensible Stylesheet Language Transformations (XSLT) is a language used to transform XML documents into alternate formats. An XSLT document is processed in conjunction with a content-only XML document to produce a new XML document or any other text based documents such as HTML or RTF.

For additional information refer to:
http://www.w3.org/TR/xslt

XPath

XPath is a non-XML language used to identify parts of XML documents. It does this by viewing the hierarchical structure of an XML document as a tree of nodes and returns results based on the position of a node, its type or content. XSLT and XPointer use XPath.

For additional information refer to:
http://www.w3.org/TR/xpath

XPointer

XPointer is a language used for locating data within an XML document based on properties such as location within the document, character content, and attribute values. It provides a quick way to address internal structures like elements, character strings and other parts of an XML document. XPointer is based on XPath.

For additional information refer to:
http://www.w3.org/TR/WD-xptr

XLink

XLink allows elements to be inserted into XML documents in order to create and describe links between resources. There are two types of links – simple and extended. Simple links are identical to HTML links enabling the linking to other HTML and XML documents. Extending links allow two-way linking between a group of documents and menu capabilities.

For additional information refer to:
http://www.w3.org/TR/xlink/

XQuery

XQuery enables users to query and extract data from an XML document. It is an extension of XPath, but has manipulation capabilities rather than being just a lookup. XML is increasingly being used to model and store structured, semi-structured and relational data, and XQuery provides a powerful mechanism to access and manipulate the data stored in XML documents.

For additional information refer to:
http://www.w3.org/TR/xquery/

XForms

XForms is an application that is integrated with other markup languages such as XHTML in order to assist in the capturing and validation of form based data in data entry devices such as browsers. It eliminates browser scripting and simplifies data-validation checks.

For additional information refer to:
http://www.w3.org/TR/xforms/

XMI

XML Metadata Interchange (XMI) enables easy interchange of metadata between tools and metadata repositories in distributed heterogeneous environments. By establishing an industry standard for storing and sharing object programming information, development teams using various tools from multiple vendors can still collaborate on applications and leverage the web to exchange data between tools, applications and repositories.

For additional information refer to:
http://www.omg.org/technology/documents/formal/xmi.htm

RSS

RSS stands for Really Simple Syndication and is a Web content syndication format. A web site that wants to allow other sites to publish some of its content creates an RSS document and registers the document with an RSS publisher. A user that can read RSS-distributed content can then use the content on a different site.

For additional information refer to:
http://www.xml.com/pub/a/2002/12/18/dive-into-xml.html